Amendments to the Specification:

Please replace the paragraph beginning on Page 1 at line 10 and ending on Page 1 at line 23 with the following amended paragraph:

The development of ultra-fast, ultra-short pulsed lasers as surgical tools for ophthalmic surgery has led to a need for enhanced diagnostic capabilities. For example, recent advances in optical surgery techniques include the use of femto-second (f s) lasers for intrastromal and non-invasive refractive surgery. For many of these techniques, high resolution optical imaging is required to thoroughly evaluate the precision, efficiency and effectiveness of these f s surgical lasers. In addition to its use with surgical procedures, it is known that high resolution optical imaging may also be used as a diagnostic tool. In particular, high resolution optical imagining may be useful in some instances to evaluate the health of various parts of the eye, such as the fundus. For instance, it is known that by imaging and studying layers of the fundus, it is possible to detect the early onset of many optical maladies such as age related ~~macula~~ macular degeneration and glaucomateous disease.

Please replace the paragraph beginning on Page 1 at line 24 and ending on Page 2 at line 11 with the following amended paragraph:

The anatomy of the fundus of an eye is known to comprise several distinct layers, to include axons, ganglion cells, bipolar cells, photoreceptors (rods and cones), pigment cells and the choroid. Further, it is well known that healthy photoreceptors within the fundus of the eye are all aligned substantially parallel to each other. Also, healthy photoreceptors are separated from each other through a distance of about two microns by regions of matrix material. On the other hand, misshapen and misaligned receptors, that are not substantially parallel to each other, are indicative of an unhealthy fundus and, thus, a potential problem. In addition to the photoreceptors, the health of other layers of the fundus can be evaluated. For example, the Henle-fibers are the axons of the bi-polar cells, connecting the photoreceptor signal to the brain. In a healthy Henle-fiber layer, the Henle-fibers have a very specific directional orientation. On the other hand, distortions in the Henle-fiber layer and the orientations of the fibers may be an early indication of age related ~~macula~~ macular degeneration.

Please replace the paragraph beginning on Page 11 at line 25 and ending on Page 11 at line 31 with the following amended paragraph:

In another application of the present invention, the Henle-fibers 66, which are the axons of the bipolar cells 68, can be imaged and diagnostically evaluated. The Henle-fibers 66 connect the photoreceptor signal to the brain, and a distortion of the directional structure of the fibers 66 can be an early indication of age related ~~macula~~ macular degeneration. As shown in Fig. 5, a three-dimensional focal point 34 on the order of 2 μm x 2 μm x 20 μm provides for imaging of the individual fibers 66 within the Henle-fiber layer.